

What is claimed is:

1. A method of forming a film, comprising the steps of:

(a) starting supply of a reaction gas at a first flow rate into a chamber in which a plasma is
5 formed, such that an initial film is formed on a wafer; and

(b) starting supply of the reaction gas at a second flow rate into the chamber in which the plasma is formed, after said step (a), such that the film is
10 formed on the initial film, the first flow rate being smaller than the second flow rate.

2. The method according to claim 1, wherein said reaction gas is a compound gas containing Si.

3. The method according to claim 2, wherein said reaction gas is one of SiH_4 , SiF_4 and TEOS.

4. The method according to claim 1, wherein said step (b) is carried out 1 to 10 seconds after said step (a) is carried out.

5. The method according to claim 1, wherein said first flow rate is in a range of one fifth to one tenth of said second flow rate.

6. The method according to claim 1, wherein said step (a) comprises the step of:

starting supply of the reaction gas at the first flow rate into the chamber via a first nozzle,

5 and

said first nozzle is provided on the chamber above a center region of the wafer.

7. The method according to claim 1, wherein said step (b) comprises the step of:

starting supply of the reaction gas at the second flow rate into the chamber via second nozzles,

5 and

said second nozzles are provided on side walls of the chamber above the wafer.

8. A method of forming a film, comprising the steps of:

(a) forming a film from a center region of a wafer by supplying a reaction gas, while a thickness
5 of the film is equal to or thinner than 10 nm; and

(b) forming the film on whole of said wafer, by supplying the reaction gas, after said step (a).

9. The method according to claim 8, wherein said step (a) comprises the step of:

supplying said reaction gas at a first flow

rate,

5 said step (b) comprises the step of:
 supplying said reaction gas at a second flow
rate, and

 said first flow rate is in a range of one
fifth to one tenth of said second flow rate.

10. The method according to claim 8, wherein said
reaction gas is a compound gas containing Si.

11. The method according to claim 10, wherein
said reaction gas is one of SiH_4 , SiF_4 and TEOS.

12. The method according to claim 8, wherein said
step (b) is carried out 1 to 10 seconds after said
step (a) is carried out.

13. The method according to claim 8, wherein said
step (a) comprises the step of:

 starting supply of the reaction gas at the
first flow rate into the chamber via a first nozzle,

5 and

 said first nozzle is provided on the chamber
above a center region of the wafer.

14. The method according to claim 8, wherein said
step (b) comprises the step of:

starting supply of the reaction gas at the
second flow rate into the chamber via second nozzles,

5 and

said second nozzles are provided on side
walls of the chamber above the wafer.